THEY ALSO SERVE WHO ONLY STAND AND WAIT

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ABSTRACT

Purpose
Waiting for service by customers is an important problem for many financial service marketers. Two new approaches are proposed. First, customer evaluation of the service is increased with an ambient scent. Second a cognitive variable is identified which differentiates customers by the way they value time so that they can be segmented.
Methodology
Pretests included focus groups which highlighted financial services and a pilot test were followed by a main sample of 607 subjects. Structural equation modelling and multivariate analysis of covariance were used for analysis.
Findings
A cognitive variable, the need for time management can be used, together with demographic and customer net worth data, to segment a customer base. Two environmental interventions, music and scent, can increase customer satisfaction among customers kept waiting in a line.
Research implications
Two original approaches to a rapidly growing service marketing problem are identified.
Practical implications
Service contact points can reduce incidence of "queue rage" and enhance customer satisfaction by either or both of two simple modifications to the service environment or a preventive strategy of offering targeted customers an alternative.
Originality
A new method of segmentation and a new environmental intervention are proposed.

KEYWORDS

Waiting lines, queues, scent, music, time segmentation.

INTRODUCTION

Despite the best efforts of financial marketers to create a favorable image of a service organization, the first impression by the consumer of a bank branch may be a line of waiting, frustrated and possibly angry consumers. This problem of waiting for service has become more important for marketers due to the reduced tolerance for waiting among many consumers.

Basic characteristics of financial services mean that waiting lines or queues cannot be avoided (Zeithaml, Parasuraman et al. 1985). In some countries this has been exacerbated by widespread closure of bank branches; these closures the result of ATMs, telephone banking and internet banking. If service provider staff (e.g. bank tellers) are unoccupied or non-service staff are visible to the customer, then many customers become more annoyed, because they feel that those staff should be serving to reduce the queue (Gurney 1990). Some banks have learnt to conceal any staff not serving customers waiting in a queue because the visible presence of those staff makes many customers more annoyed with their wait.

This study found evidence that anger and frustration was even more likely at bank branches and financial institution service centers than many other service contact points. Initial research for this study used focus groups to identify locations where consumers become most angry while waiting for service. The most frequently cited locations were banks and financial institution service centers. In some locations such as theme parks, consumers may wait for 45 minutes or more without becoming angry or frustrated, but focus group members stated that they were likely to become

annoyed after four or five minutes waiting in a bank branch. In the words of one respondent: "I think, to me, the banks are such boring, uninteresting places. That's why I can't stand to wait there. Two minutes seems like an eternity."

A strategy sometimes used to alleviate the effects of waiting is to employ distractions such as live entertainment or video. Katz, Larson and Larson (1991) studied customer perceptions of waiting under different conditions in a bank setting. The major findings of the study were:

1. In this setting (a bank), the average overestimate is about one minute, and waits of 5 minutes or less are considered reasonable.
2. As perceptions of waiting time increase, customer satisfaction with the service provider tends to decrease.
3. Increased distractions make the waiting experience more interesting and tend to increase customer satisfaction toward the service provider.
4. Information on expected time in line tends to improve the accuracy of customer perceptions of waiting but does not influence customer satisfaction.

Banks have experimented with monitors displaying advertisements to customers waiting in lines. However there is conflicting evidence on the effectiveness of using video / TV and it is not always suitable in service environments. The Checkout Channel in supermarkets in the early 1990s was a failure.

BACKGROUND AND PREVIOUS RESEARCH

Customer evaluation of many services is critically influenced by waiting time. Many studies have revealed the negative effect of waiting lines on consumers (Katz, Larson and Larson 1991; Taylor 1994; Hui and Tse 1996, inter alia). It is common for consumers to overestimate the time that they spend waiting ((Hornik 1984)),

especially in banks. As the perceived time of waiting increases, customer satisfaction typically decreases (Katz, Larson and Larson 1991). Customers do not evaluate service quality solely on the outcome of a service, but also on the process of service delivery. Some research on customer service satisfaction found that time was more important than quality in determining customer satisfaction in service experiences (Davis and Vollmann 1990; Friedman and Friedman 1997) . Consumers are increasingly willing to use waiting lines as an indicator of poor service because they value time more than ever. The consequences of the trend to value time more include the explosion of convenience goods, convenience stores, the number of consumers who use convenience as a primary basis for making purchase decisions (Stephenson and Willett 1969) and it is a contributory factor to brand loyalty. Double income time poor families want to outsource household chores (Dudley 2000).

Consumers in a modern society have been becoming less tolerant of waiting and of firms that are perceived to "waste" the consumer's time (Katz, Larson et al. 1991; Taylor and Claxton 1994; Hui and Tse 1996). The media have reported queue rage or anger over waiting in lines as well as telephone rage with increasing frequency and media reports range from counseling for service staff to murders committed over waiting in a line (Fraser 2005). There are more time pressed demographic groups (such as married, employed women with children and two income families) today than a generation ago. Even those groups that actually have more free time today than a generation ago, perceive that they have less time (Robinson and Godbey 1997).

A NEW BASIS FOR SEGMENTATION?

Previous approaches by marketers to the problem of waiting assume that the negative effects of waiting are the same for all customers and all customers are treated alike.

However one of the strongest changes in marketing has been to recognize that all customers are not alike and this study raises the question whether all consumers react the same way to waiting. If they don't, there may be an opportunity for marketers. This study introduces a new concept to the marketing literature on waiting, namely, the need for time management. The need for time management is a cognitive variable involving a structure of beliefs held by the individual at any one time. These beliefs concern their perceptions of time and its value to them. This concept is incorporated into a model to describe the relationship between the need for time management by the individual, their emotions and their evaluation of the service.

The need for time management is based on a Time Structure Questionnaire (TSQ) developed by psychologists Bond and Feather (1988). The TSQ measures the extent to which respondents perceive their use of time as structured and purposive. Bond and Feather (1988) found five dimensions from their factor analysis of the TSQ: sense of purpose, structured routine, present orientation, effective organization and persistence. The higher the individual's TSQ score, the more the individual prefers to have their time highly organized, and the greater their need for structure in the management of their time. McDonald (1994) adapted the TSQ to study time use in shopping. He contended that the subjective experience of time is a perceptual characteristic of individuals, which can contribute to more effective retail marketing strategies. In this study, this concept is called the need for time management and it is proposed to adapt the concept to the study of waiting for service. This concept could be used as a new basis for segmenting consumers. By matching the need for time management with readily identifiable demographic characteristics, marketers could identify groups who are more likely to feel aggravated while waiting for a service and

more likely to respond to marketing communications that address the growing need of many consumers to have their time respected by marketers.

The following hypotheses are proposed:

H1: The subject's need for time management is a significant causal factor influencing their reported level of discomfort when waiting in a line.

H2: The subject's level of discomfort is a significant causal factor that influences their evaluation of the service while waiting in line.

H3: The subject's need for time management has an effect on their evaluation of the service, with their level of discomfort a mediating factor.

These relationships are illustrated in **diagram 1**. This model will also be used to test a new approach, using an environmental intervention, to alleviating the anger felt by customers while waiting in lines.

ENVIRONMENTAL INTERVENTIONS TO MODIFY PERCEIVED TIME

The traditional approach to the problem by service businesses was to use queuing theory and the manipulation of supply and demand. As we observe every day, these approaches have had limited success, and so recently, attention has been directed to understanding why the customer's perception of a wait differs from the actual wait time. Understanding these perceptions opens the door to understanding how the service provider can make a wait seem better or worse, without actually changing the length of a wait. The issue is important because waiting has an effect on customer satisfaction, through its effect on the customer's emotions. The effect of customer satisfaction on factors critical to the success of firms, such as loyalty, is well documented.

Apart from operations management, previous studies on waiting and its effects on customer satisfaction have tended to focus on customer perceptions of the wait and how this might be affected by: filled wait time (Taylor and Claxton 1994); service provider control (Taylor 1994; Tom and Lucey 1995; Baker and Cameron 1996); waiting duration or queuing information (Hui and Tse 1996); lighting, color, music, temperature (Baker and Cameron 1996); music (Chebat and Filiatrault 1993; Baker and Cameron 1996). The effect of time fillers on perceived waiting time is generally small and dependent both on the context studied and whether a field or laboratory experiment is used (Antonides, Verhoef et al. 2002).

This paper discusses a new approach using scent, not previously considered in the marketing literature, to reduce the wait time as perceived by the consumer. The study compared the use of scent with the use of music and a control group with no intervention in a service environment.

Music

Previous research has demonstrated a relationship between the use of music and the perception of time (Tom, Burns & Zeng (1997); Antonides, Verhoef & Aalst (2002)). Previous research in this area has generally not accounted for the relationship between music and emotions and the consequent effect on customer evaluations. For the present research it is suggested that music, which is familiar to most customers and is fast, appears to be an appropriate choice for research on waiting (Milliman 1986; Yalch 1986).

Ambient Scent In The Marketing Environment

One factor may be relevant but has not been tested, or even discussed, in the literature on waiting for service. A great deal has been published on the effect of the sense of smell on evaluations and behaviors, but little in the marketing environment, especially regarding ambient or environmental scent, as opposed to the scent attached to a particular object. For many years, retailers have enhanced their sales by the aroma of freshly ground coffee or freshly baked bread and bakery goods. Humans have come to depend on other senses with the result that smell has become rather neglected, and consequently poorly developed. While smell is taken for granted by humans, it can still be quite sensitive. The journal Nature Genetics recently reported that women can smell out the man that will make the best father of their offspring by detecting the odor of a man's genetic make-up (Jacob, McClintock et al. 2002). McClintock has observed: "Women can actually smell genetic differences (in men) …as small as a single gene. It's like being able to see the difference in a snow flake with your bare eyes. People say humans don't have a good sense of smell. What we've shown is that humans do have an exquisite sense of smell, and they can pick up the difference of a single gene." (Chester 2002)

It is then ironic that the sense of smell has not been investigated in this context, because of all the human senses, the olfactory sense has by far the greatest impact on people's emotions. The limbic system is the most primitive part of our brain and the seat of immediate emotions. Some odors provoke basic emotional reactions because the olfactory lobe is actually part of the limbic system (Hirsch and Gay 1991; Hirsch and Gay 1992). The nose is directly connected to the olfactory lobe and the limbic system. More than any other sense, smell taps into the feelings marketers want to tap

(Wilke 1995). Studies by Hirsch (1991; Hirsch and Gay 1992) found that certain scents, even in fairly low concentrations can affect peoples' moods. Concentrations so weak that they are below the threshold of consciousness, still affect peoples' moods subconsciously (Hirsch and Gay 1992). Spangenberg, Crowley and Henderson (1996) found that pleasant scents or aromas in a retail environment improve the perception of customers as to the evaluation of the store and that customers perceived that they were in the store for a lesser period than actual when a store was scented.

This paper asks whether this effect of scent on the perception of time might be strong enough to assist marketers whose customers must wait in lines. Since we also know that scent affects our emotions, is the effect from a subtle ambient environmental scent sufficient to perceptibly reduce the anger and negative emotions we experience while waiting for service?

On the basis of this review of the literature, the following hypotheses are proposed:

H4: (a) Groups that experienced pleasant music or scent stimulus while waiting will tend to evaluate service levels more favorably than a control group that did not experience music or scent.

(b) However, there will be no difference between the music and scent groups in terms of their effect on the perceptions of quality service.

H5: Compared to a control group, groups exposed to a pleasant scent or music will tend to report lower levels of discomfort while waiting in line for the service.

H6: The subject's need for time management is not directly affected by the scent or music treatments, but moderates their level of discomfort. Discomfort will have a significant effect in the evaluation of the service.

RESEARCH METHOD AND ANALYSIS

MEASURES

A survey was developed and tested (in a pilot study) to capture the immediate emotional mood of the subject, their evaluation of the service, their personal preferences for time management and some demographic data. An important construct relates to the current emotional status of the customer, described here as discomfort. Negative affect or emotion has been found to be associated with service evaluations (Folkes, Koletsky et al. 1987; Taylor 1994). The items used as measures for the construct of discomfort were drawn from a number of different scales (Batra 1986; Edell and Burke 1987; Holbrook and Batra 1987) and measured on a 7 point scale, anchored by 1= "not at all "and 7= "very" (Holbrook and Batra 1987). Six items were adopted, based on the reported reliability of items in the two studies by Taylor (1994; Taylor 1995) and the study by Hui and Tse (1996).

The survey also included several questions on service evaluation that were adapted from the SERVQUAL measure (Zeithaml and Bitner 1996). These have been validated by previous research on waiting (Taylor 1994), and used to gauge the evaluation of a service. Responses on these items were tested with confirmatory factor analysis, for their ability to measure the construct of "evaluation of service".

- Organization X offers friendly service.
- Organization X gives prompt service.
- Overall, Organization X offers excellent service.
- Organization X performs the service right the first time.
- Organization X is open to customer views.

Based on the previous research of the Time Structure Questionnaire or TSQ (Bond and Feather 1988), 22 items were selected to evaluate the time structure of respondents.

One section sought information on the subject's demographic background that would facilitate the development of possible segmentation profiles. Subjects were asked to identify their marital status, age and gender.

STATISTICAL TESTS FOR HYPOTHESES ONE THROUGH THREE

In addition to the measurement models, such as that used for the service evaluation construct, two structural models were used to test hypotheses one to three. These two structural models concern the possible relationship of an individual's perception of time to their evaluation of the service after a wait in line. One is a mediating model (diagram 1) where the relationship of the subject's time perception to service evaluation is mediated by an element of their emotions (discomfort). This is the model proposed in this study. However, an alternative or competing model is also tested allowing for a direct relationship between time perception and service evaluation. The statistical technique that will be used to test hypotheses one to three is structural equation modeling.

This study uses a two-step modeling approach to deal with two conceptually distinct models, measurement and structural, when testing a full model that includes a number of latent variables. The study employs confirmatory factor analysis to confirm measurement models, such as the link between friendly service and overall service evaluation, and structural equations between the independent latent variables (e.g. the need for time management) and the dependent latent variables (e.g. discomfort) to

indicate the structural model (Schumacker and Lomax 1996). This structural model describes the links between the underlying factors. For this study, they are the need for time management, emotions or discomfort, and service evaluation, as in diagram 1.

STATISTICAL APPROACH FOR OTHER HYPOTHESES

Hypotheses four to six were to be tested using either a multi-sample SEM analysis or a MANCOVA (multivariate analysis of covariance).

PRETESTS

Two types of pretests were conducted. One consisted of a series of focus groups which are valuable in exploring topics and generating hypotheses. The second pretest was a pilot test of the main questionnaire to ensure that there were no problems with the survey instrument or the experimental procedure.

SAMPLE SIZE AND COMPOSITION

The total sample size for the main study was n=607 cases. The intent was to collect approximately 200 in each of three waiting environments (control, scent and music) to meet the criteria required by LISREL. The composition of the groups appears to be sufficiently diverse, with a wide age range across the groups and representation of both genders in all groups, that it is not likely to affect the results of the main hypotheses. However, testing for the effects of covariates will account for these factors.

RESEARCH VENUE

Several banks were contacted but all declined to co-operate. The service provider selected for the study was a government service center where drivers' licences and

registrations are issued. Data was collected only when the duration of the wait met a pre-defined level of 15 minutes. The period of 15 minutes was chosen on the basis of several criteria: focus group research, data provided by the co-operating service provider and a pilot study. Data was collected from different branches or locations to account for differences between locations as a source of variation in the data.

PROCEDURE FOR CONDUCT OF SURVEYS

At peak queue times in a customer service centre, a questionnaire was administered while the customers were waiting in line. The customer survey was distributed in four different versions, varying the sequence of questions. This was done to account for any potential effect from the order of the questions.

CHOICE OF CONTEXTS AND INTERVENTIONS

After the pilot study, the final survey instrument was presented to 206 subjects in the control group, with no interventions used. After eliminating cases with missing data (list-wise deletion), the data from 187 respondents were used as input into a Structural Equation Model (specifically LISREL) to establish relationships independent of the two experimental treatments. For reasons explained earlier, familiar, fast music appeared to be a suitable choice based on the literature. A radio station with high ratings playing contemporary music was selected. In order to dispense a suitable fragrance into the service environment, a device was needed which would infuse a large area with a consistent aroma at regular intervals. A Calming blend fragrance (mainly lavender) was chosen.

FINDINGS

THE MEASUREMENT MODELS

A series of measurement models, each testing constructs and related measures, were evaluated separately from the structural models. The constructs were service evaluation, emotions or discomfort, and the five dimensions of the need for time management. In the case of the service evaluation measurement model, for example, a confirmatory factor analysis using 203 observations found that the model has a good fit to the data in terms of all the criteria used. The chi-square value (2.28) is not large compared to the number of degrees of freedom (2). This result is not statistically significant (P=0.32), which is an indicator of good fit. The RMSEA (root mean square error of approximation) for the model is 0.026. This is certainly less than 0.05, which further indicates a good fit of data and model. The G.F.I., A.G.F.I, N.F.I. and C.F.I. all exceed 0.9 which further reinforces that the model fits the data. A good fit of the model to the data was also found for the measurement model for emotions reported during the wait and for the measurement models for the 5 constructs underlying the need for time management.

RESULTS for STRUCTURAL MODEL with TIME in CONTROL CASE

Comparison Of Direct Effect Vs. Mediating Models

This structural model was employed to test the hypothesis that subjects' need for time management (or for brevity, Time Management) had an (indirect) effect on Service Evaluation, and that the subject's Emotions mediate the relationship between the need for time management and service evaluation. These emotions are described as discomfort in this study and include anger and concern or anxiety. The initial model was evaluated using LISREL with a mediating model specified. The mediating

model states that the emotion of discomfort mediates the relationship between the need for time management and service evaluation.

Hypotheses one to three were tested by an alternative or competing models approach. The mediating model described above was compared with a direct effects model to see which was a better fit to the data. This direct effects model allows for the need for time management to have a direct effect on the subject's evaluation of service, without the mediating effect of emotions. The results of the LISREL analysis demonstrate that the subject's need for time management has a negative effect on emotions, and that emotions have a negative effect on service. For example, if a customer who prefers a tight schedule and prefers to follow a regular routine, is kept waiting for a long time then they are more likely to become annoyed at the wait than individuals who are more flexible in their use of time. These emotions of annoyance and anxiety in turn cause the customer to have a worse perception of the service. The analysis showed that the need for time management did not have a direct effect on service. Therefore, the main hypothesis that the subject's emotions mediate the relationship between the need for time management and service evaluation is supported. The criteria for goodness of fit in the table below show that this model is a good fit to the data.

Table 1: Goodness of Fit for Structural model

Goodness of fit criteria	Value for model	Good fit indicated if
Standardized Root Mean Square Residual	.04	< 0.05
Goodness of Fit Index	.96	Close to 0.9 or > 0.9
Adjusted GFI	.92	Close to 0.9 or > 0.9
Normed Fit Index	.95	> 0.9
Comparative Fit Index	.98	> 0.9
Incremental fit index	.98	Closer to 1 in the range of 0 to 1.
Relative fit index	.93	Closer to 1 in the range of 0 to 1.
Chi-square with 25df	41 P=0.02	❹^2 Not large compared to # of degrees of freedom & statistical nonsignificance

LISREL also reports that the squared multiple correlations for the structural equations for service in this mediating model is 0.30. This means that the model explains 30% of the variation in service evaluation. The same statistic for emotions is 0.21. This means that the model explains 21% of the variation in service evaluation.

The structural model supported all of the first three hypotheses. Specifically, the data supported H1 that the subject's need for time management is a significant causal factor influencing their reported level of discomfort when waiting in a line. Support was also found for H2 that the subject's level of discomfort is a significant causal factor that influences their evaluation of the service while waiting in line.

Finally, there was support for H3 that the subject's need for time management has an effect on their evaluation of the service, with their level of discomfort a mediating factor.

MULTI-SAMPLE ANALYSIS TO COMPARE TREATMENTS

One approach to evaluate the effect of the interventions, scent and music, would have been a multi-sample analysis using structural equation modeling. When the structural model is run with the data from the scent and music interventions, there is also a good fit between the model and data, as there is in the control case. However, the relationships between the variables become unstable when these interventions are used. It appears that there is an interaction effect between the interventions (scent and music) and the relationship between the latent variables the need for time management, discomfort and the customer evaluation of service. It may be that the effect of these interventions is stronger than any relationship of the Need for Time Management to Emotions in rating service quality. In any case, a multi-sample

analysis in LISREL requires similarity between the models for the sample groups being compared (Hair, Anderson et al. 1995). As a result, the multi-sample LISREL analysis comparison of means was not conducted. Instead, a MANCOVA (multivariate analysis of covariance) was used to test the different effects of the scent and music treatments.

MANCOVA, STRUCTURAL MODELS AND INTERVENTIONS

In order to evaluate the effect of the interventions, scent and music, a multivariate analysis of covariance (MANCOVA) was conducted. The fixed or independent variable was context or intervention. The three intervention scenarios are the control case, the use of scent or of music. In table 2 below the control case was context 1, scent was context 2, and music was context 3. The dependent variables are service evaluation and anger. The covariates were age, gender and the service required.

Table 2a
MANCOVA Estimated marginal means: Context Estimates

		Mean	Std. Error	95% Confidence Interval	
Dependent Variable	CONTEXT			Lower Bound	Upper Bound
Service evaluation	1 Control	**3.7**	.076	3.615	3.915
	2 Scent	**3.4**	.077	3.310	3.614
	3 Music	**2.8**	.077	2.696	3.000
Anger	1 Control	**3.79**	.128	3.540	4.043
	2 Scent	**4.1**	.130	3.860	4.369
	3 Music	**5.3**	.130	5.079	5.588

a Evaluated at covariates appeared in the model: Service required = 2.14, AGE = 33.52, GENDER = 1.46.

Table 2b: MANCOVA Pairwise Comparisons (Context estimates)

			Mean Difference (I-J)	Std. Error	**Statistical Significance**
Dependent Variable	(I) CONTEXT	(J) CONTEXT			
Service evaluation	1	2	.303*	.109	**.017**
		3	.917*	.109	**.000**

2	1	-.303*	.109	**.017**
	3	.614*	.110	**.000**
3	1	-.917*	.109	**.000**
	2	-.614*	.110	**.000**

Based on estimated marginal means

* The mean difference is significant at the .05 level.

a Adjustment for multiple comparisons: Bonferroni.

The effect of interventions

The results show that adding only scent to the environment increases the customer evaluation of service, and that introducing only music to the environment increases the customer evaluation of service even more than the control case or the scent intervention. These results are statistically significant at the $p \leq 0.05$ level (0.017 and 0.001 respectively in the table Pairwise Comparison). In the case of anger, scent does reduce the level of anger reported by the customer, but the difference is not statistically significant.

In table 2a "Estimated Marginal Means: Context estimates", the mean for service evaluation declines from context 1 (control) to context 2 (scent). The mean falls from 3.7 to 3.4. The mean for service evaluation also declines from context 2 (scent) to context 3 (music), falling from a mean of 3.4 to 2.8. A lower score on this scale represents a higher rating of service. On the scale for anger, a lower score represents a higher reported level of anger. Thus, the music intervention produced the best service evaluation. The mean scores for anger increased from 3.7 in the control case to 4.1 for scent. This represents a fall in anger but it was not statistically significant (0.232). The mean for anger further increased (anger decreased) from 4.1 to 5.3 when music was introduced. This means that the reported level of anger was reduced by music and this result was statistically significant at the $p \leq .05$ level (0.001).

Age was found to be a significant covariate with service evaluation. Age is positively related to the customer evaluation of service ($p \leq 0.009$). Gender is a marginally

significant effect in the customer evaluation of service ($p \leq 0.052$). No covariate is a significant effect on the reported level of anger.

The hypotheses relating to the scent and music interventions were:

H4: Groups that experienced pleasant music or scent stimulus while waiting will tend to evaluate service levels more favorably than a control group that did not experience music or scent. However, there will be no difference between the music and scent groups in terms of their effect on the perceptions of quality service.

H5: Groups who were exposed to a pleasant scent or music will tend to report lower levels of discomfort while waiting in line for the service.

These hypotheses (4 and 5) were supported.

H6: *The subject's need for time management is not directly affected by the scent or music treatments, but moderates their level of discomfort.*

This hypothesis must be rejected. We cannot reject the possibility that the subject's need for time management is directly affected by the scent or music treatments.

CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

PART 1: THE 3 LATENT VARIABLES

This research found that the need for time management indirectly influences customer satisfaction when the customer is waiting for service by a negative effect on emotions which have a negative association with service evaluation.

This offers a new perspective and opportunity for marketers. For example, a bank that can identify high value customers with a high need for time management may wish to offer them a different 800 telephone number with a shorter response time.

A limitation of the study is that the relationships between the three variables, the need for time management, discomfort and evaluation of service become unstable when the interventions of music and scent are used. It appears that there is an interaction effect between the interventions and the relationship between the latent variables.

PART 2: THE MUSIC AND SCENT INTERVENTIONS

While music had a more significant effect on customer reactions in this study, scent also had a significant effect and it may be easier to implement since it is non-intrusive.

FUTURE RESEARCH

Future research should investigate the effect of different types of music on customers waiting for service. More importantly, the research should be replicated across different service situations. In this study, the scent was released at a low level so that it was almost imperceptible but in a large room full of customers a slightly more noticeable scent level may have a more positive effect. Other questions include: How does video compare with music and scent in the effect on customers waiting for service? In what situations is physical discomfort from standing important as a mediating factor in customer reactions? Does the value of a service affect customer reaction in some situations while a customer is waiting for service? Is nationality or ethnic group significantly associated with the need for time management? There is some evidence that ethnicity is relevant but this does not appear to have been explored at all in the literature. In what circumstances is it important to offer consumers a

choice between types of transaction lines, such as the choice of paying more in order to get faster service?

Recruiting new customers is estimated to cost a business between five and ten times the cost of retaining an existing customer. Many businesses now appreciate that customer satisfaction is a key factor in reducing customer turnover. What is less widely appreciated is the importance of having "very satisfied" customers and not "just satisfied" customers (Heskett, Jones et al. 1994).

The problem of customer reactions to queues or waiting lines is too complex to be resolved with a single solution. Where they are appropriate, all of the approaches discussed in this paper need to be implemented by service providers. In a world where consumers perceive themselves to be time poor and where their first impression of an organization is often from its waiting lines, businesses must remember that in the words of John Milton: "they also serve who only stand and wait".

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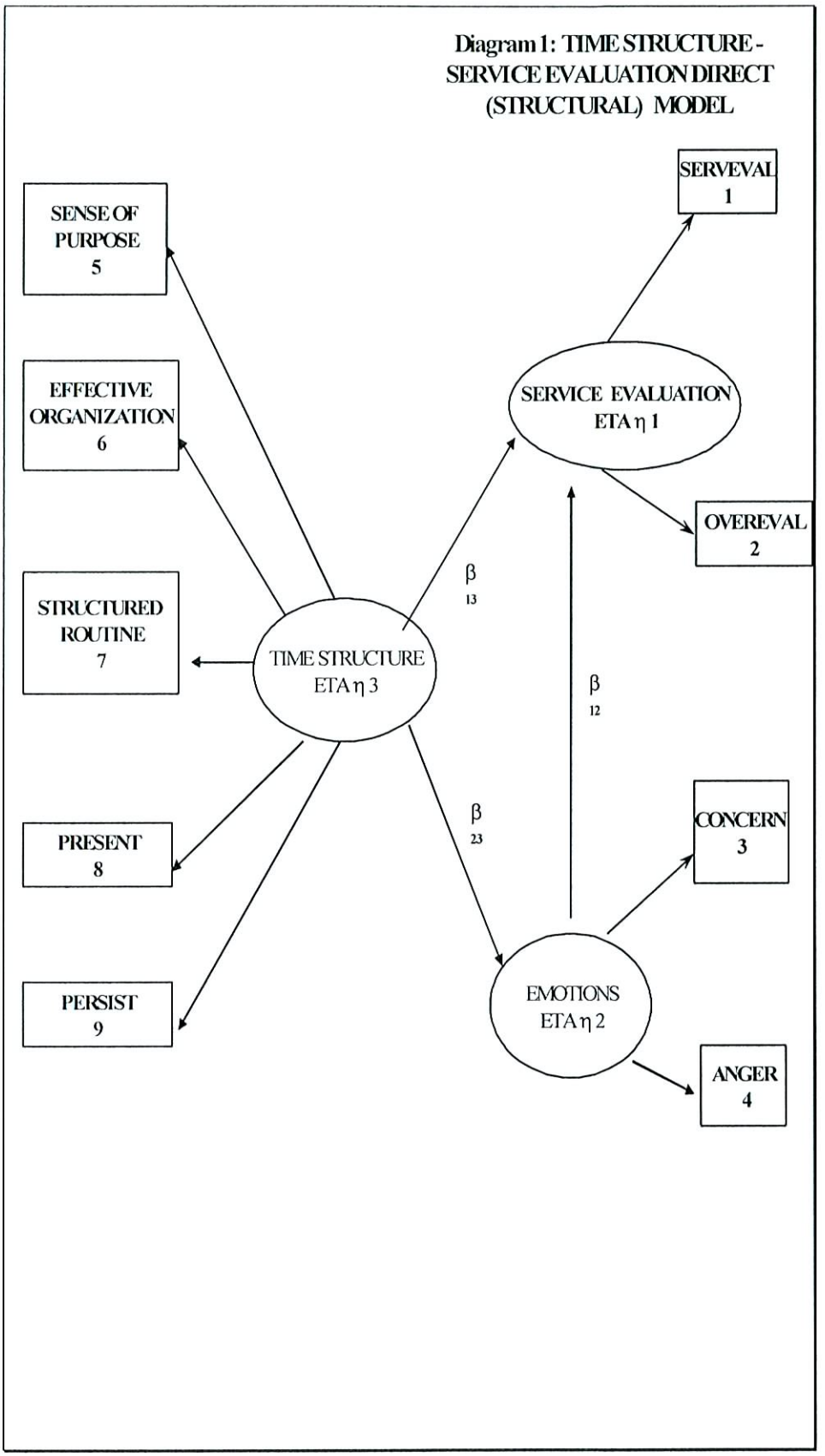
Diagram 1: TIME STRUCTURE - SERVICE EVALUATION DIRECT (STRUCTURAL) MODEL
SERVEVAL 1
SENSE OF PURPOSE 5
EFFECTIVE ORGANIZATION 6
SERVICE EVALUATION ETA η 1
OVEREVAL 2
STRUCTURED ROUTINE 7
β 13
TIME STRUCTURE ETA η 3
β 12
β 23
CONCERN 3
PRESENT 8
EMOTIONS ETA η 2
PERSIST 9
ANGER 4